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09/575,749	05/22/2000	William P. Alberth Jr.	CS10614	1184

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Motorola Inc
Intellectual Property Dept(BMM)
600 North US Highway 45 AN475
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EXAMINER

SHIN, KYUNG H

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/575,749

Applicant(s)

ALBERTH JR. ET AL.

Examiner

Kyung H Shin

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

HL

DETAILED ACTION

Response to Arguments

1. In view of the Appeal Brief filed on 11/15/2004, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Claims 1 - 19 are pending. Claims 1, 8, 14, 15 are amended. Claims 18, 19 are new. Independent claims are 1, 8, 14, 18.

Response to Remarks

3. Applicant's arguments, appeal brief, filed 11/15/2004, with respect to the rejection(s) of claim(s) 1-19 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

- 3.1 Applicant argues that for Claims **1b**, **8a**ii, **8c**ii and **14c**, prior art does not disclose "... access to third card only when two cards (card one and card two) are operatively coupled ...".

Storck discloses split authorization requiring the coupling of two data carriers (i.e. smart cards) to complete authorization and for operation. (see Storck col. 12, lines 45-48: **Two data carriers (i.e. smart cards)** must be **used together** (i.e. coupled together) in order to complete **authorization** and access the data on the card.) By definition, complimentary is defined as "... complement- something that completes ...". The two cards must operate together to complete authorization.

Once authorization has been completed, prior art discloses transferring data between data carriers devices (i.e. smart cards). (see Storck col. 4, line 52-58; col. 4, line 31-34: Principal objective of prior art is to transfer data (i.e. transaction) between a first and a second data carrier (i.e. smart cards). -- "*... transferring data from one of said carriers to the other during a transaction between said first and second carriers ...*") Storck in view of Kramer discloses transactions utilizing smart card technology with three devices interconnected for the completion of transactions through network communications. (see Kramer col. 4, lines 57-65; col. 140, lines 39-42: three party transactions)

- 3.2 Applicant argues that for Claim **18c**, prior art does not disclose "... card inaccessible when **not connected** ...".

Prior art discloses that authorization is required in order to access data on data carrier (i.e. smart card), then access is not allowed without or before the completion of the authorization process. (see Storck col. 4, lines 52-58: **authentication** (i.e. code) is **required** in order to **access** data on the card)

3.3 Applicant argues that for Claim **8bi1**, prior art does not disclose “ ... **duplicate copy of data** ... “.

Prior art discloses the capability to copy data from one data carrier (i.e. smart card) to a second data carrier. If all of the data from one card is copied onto a second card, then a duplicate copy of one card is on the second card. (see Storck col. 12, lines 24-26: prior art discloses the capability to copy data from one card to another card -- “... *Such data can be held in memory in such a way that it can be copied, for example copied onto another microcircuit card...*”)

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 14, 15 are rejected under 35 U.S.C. 112, **first** paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

A claim word, "a third device" was added when an amendment after non-final was filed. The description of new matter was not properly described in the application, thus it was not satisfactorily resolved the term definition of a claim word, "a third device" and consequently raised doubt as to possession of the claimed invention. (see MPEP 7.31.01) Appropriate corrections are required.

Claim Rejection – 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 - 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storck et al. (US Patent No. 5,434,395) in view of Kawan et al. (US Patent No. 6,289,324) and further in view of Kramer et al. (US Patent No. 6,324,525).

Regarding Claim 1 (Currently Amended), Storck discloses a personal data storage apparatus comprised of:

- c) a second interface circuit coupled to said memory device and providing communications access to the second personal data storage device. (see Storck

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col. 11, lines 34-51; col. 5, lines 16-24: interface circuit for data transfer between two data carriers or smart cards (i.e. data storage devices))

a) a first user personal data storage device including a memory device storing; (see Storck col. 11, lines 52-56: smart card memory utilization)

i) a first set of user data; (see Storck col. 11, lines 43-51: data storage)

ii) Storck discloses the usage of encryption technology. (see Storck col. 2, lines 58-59; col. 19, lines 56-59: encryption security techniques) Storck does not specifically disclose the usage of encryption keys for secure protection of data. However, Kawan discloses the usage of encryption keys with a first encryption key for encrypting at least part of said first set of user data; (see Kawan col. 5, lines 52-56; col. 9, lines 2-26; col. 10, lines 7-17: encryption keys used for secure protection of data)

b) Storck discloses the usage of smart card technology for transactions

implementing split authorization which allows access only when two data carriers or smart cards are coupled together. (i.e. only when a second personal data storage device is operatively coupled to said first personal data storage device) (see Storck col. 12, lines 45-48; col. 5, line 64; col. 6, line 9) Storck does not specifically disclose a three party transaction between multiple devices.

However, Kramer discloses a three party transaction, a first interface circuit coupled to said memory device granting conditional access to a third device to data therein using an appropriate data exchange protocol between the first

personal data storage device and the third device; (see Kramer col. 4, lines 57-65; col. 140, lines 39-42: three party transactions utilizing smart card technology)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Storck to securely protect data utilizing encryption keys as taught by Kawan and to enable performing a three party transaction utilizing smart card type devices as taught by Kramer. One of ordinary skill in the art would be motivated to employ Kawan in order to offer enhanced convenience and security completing transactions utilizing smart card technology (see Kawan col. 2, lines 12-17: “ ... *smart card that offers enhanced convenience when assisting a customer in executing a transaction ... smart card that can acquire information regarding a consumer's transactions and establish a system automated task for carrying out such financial transactions ...*”) and to employ Kramer in order to enable optimum and secure two party and three party electronic transactions. (see Kramer col. 3, lines 42-46: “ ... *allows for robustly secure two-party data transmission ... meet the ultimate need of the electronic commerce market for robustly secure three-party data transmission ...*”)

Regarding Claims 2, 9 (Original), Storck discloses the personal data storage apparatus of claim 1 further comprised of a processor (see Storck col. 1, lines 33-36), operatively coupled to said memory device and to said first and second interface circuits. (see Storck col. 12, lines 7-18; col. 5, lines 42-47: coupled data carriers in communications for transactions)

Regarding Claims 3, 10 (Original), Storck discloses the personal data storage apparatus of claim 1 wherein said second personal data storage device is operatively coupled to said first personal storage device using a mechanical coupling. (see Storck col. 18, lines 31-38; col. 5, lines 51-63: connection for data carrier (i.e. smart card) transactions)

Regarding Claim 4 (Original), Storck discloses the personal data storage apparatus of claim 3 wherein said mechanical coupling is a connector. (see Storck col. 10, line 11-13: connector utilized for communications between data carriers)

Regarding Claims 5, 11 (Original), Storck discloses the personal data storage apparatus of claim 1 wherein said second personal data storage device is operatively coupled to said first personal storage device using a wireless connection. (see Storck col. 19, lines 14-22: infrared (i.e. wireless) communications)

Regarding Claims 6, 12 (Original), Storck discloses the personal data storage apparatus of claim 5 wherein said wireless connection is a radio link. (see Storck Fig. 15; col. 8, line 18-21: radio frequency (i.e. wireless) communications)

Regarding Claims 7, 13, 16 (Original), Storck discloses the personal data storage apparatus of claim 1, where an agent of the issuer of the personal data storage

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apparatus can recreate the user data from a single part of the personal data storage apparatus. (see Storck col. 7, lines 5-16; col. 11, lines 52-56; col. 12, lines 15-18: data copy techniques, transfer of data between different memory regions of data carrier (i.e. smart card))

Regarding Claim 8 (Currently Amended), Storck discloses a personal data storage apparatus comprised of:

- b) a second personal data storage device coupled to said first personal data storage device and being comprised of:
 - i) a second memory device storing; (see Storck col. 11, lines 52-56: smart card memory)
 - 1) a substantially duplicate copy of said first set of user data; (see Storck col. 12, lines 24-26: data copied from one data carrier or smart card to another (i.e. all data on card equals duplicate copy))
- d) whereby user data in either said first or second personal data storage device is accessible and usable only when said first and second personal data storage devices are in communication with each other. (see Storck col. 12, lines 45-48: split authorization requires both data carriers (i.e. smart cards) coupled together, data transactions only possible when two data carriers are coupled together)
- a) a first personal data storage device comprising:

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- i) a first memory device storing; (see Storck col. 11, lines 52-56: smart card memory)
 - 1) a first set of user data; (see Storck col. 11, lines 43-51: smart card user data stored)
 - 2) Storck discloses the usage of encryption technology. (see Storck col. 2, lines 58; col. 19, lines 56-59: encryption security techniques) Storck does not specifically disclose the usage of encryption keys in the secure protection of data. However, Kawan discloses the usage of encryption keys with a first encryption key for encrypting at least part said first set of user data; (see Kawan col. 5, lines 52-56; col. 9, lines 2-26; col. 10, lines 7-17: encryption key utilization for secure protection of data carrier (i.e. smart card) data)
- ii) a first interface circuit coupled to said memory device granting conditional access to data therein using a predetermined protocol and only when a second personal data storage device is operatively coupled to said first personal data storage device; (see Storck col. 11, lines 18; col. 12, lines 45-48: data transaction between two data carriers (i.e. smart cards))
- iii) a second interface circuit coupled to said memory device and providing access to a second personal data storage device; (see Storck col. 11, lines 34-51; col. 5, lines 16-24: interface circuit for transactions between two data carriers (i.e. smart cards))

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c) Storck discloses the usage of encryption technology. (see Storck col. 2, lines 58; col. 19, lines 56-59) Storck does not specifically disclose the usage of encryption keys in the secure protection of data. However, Kawan discloses the usage of encryption keys with a second encryption key for encrypting at least part said first set of user data; (see Kawan col. 5, lines 52-56; col. 9, lines 2-26; col. 10, lines 7-17: encryption key utilization for secure protection of data carrier (i.e. smart card data))

ii) Storck discloses a second interface circuit coupled to said memory device granting conditional access to data therein using a predetermined protocol and only when said second personal data storage device is operatively coupled to said first personal data storage device; (see Storck col. 12, lines 45-48: split authorization requires two data carriers (i.e. smart cards) coupled before data transactions) Storck does not disclose three party transactions. However, Kramer discloses granting access to data when said second personal data storage device is operatively coupled to said first personal data storage device (i.e. a three party transaction)) (see Kramer col. 4, lines 57-65; col. 140, lines 39-42: three party transactions utilizing smart card technology)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Storck to securely protect data utilizing encryption keys as taught by Kawan and to enable performing a three party transaction utilizing smart card type devices as taught by Kramer. One of ordinary skill in the

art would be motivated to employ Kawan in order to offer enhanced convenience and security completing transactions utilizing smart card technology (see Kawan col. 2, lines 12-17) and to employ Kramer in order to enable optimum and secure two party and three party electronic transactions. (see Kramer col. 3, lines 42-46).

Regarding Claim 14 (Currently Amended), Storck discloses a method of securing access to data stored in a personal data storage device comprised of the steps of:

- a) storing personal data in first and second data storage devices that are capable of being operable coupled to each other; (see Storck col. 5, lines 1-7: data carriers (i.e. smart cards) coupled together for data transactions)
- b) Storck discloses the usage of encryption technology. (see Storck col. 2, lines 58; col. 19, lines 56-59: encryption security techniques) Storck does not specifically disclose the usage of encryption keys in the secure protection of data. However, Kawan discloses the usage of encryption keys for encrypting said personal data in a first data storage device using a first encryption key and encrypting it in said second device using a second encryption key; (see Kawan col. 5, lines 52-56; col. 9, lines 2-26; col. 10, lines 7-17: encryption keys for secure protection of data carrier (i.e. smart card) data)
- c) Storck discloses the usage of smart card technology for transactions. (see Storck col. 12, lines 45-48; col. 5, line 64; col. 6, line 9) Storck does not

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specifically disclose a three party transaction between multiple devices.

However, Kramer discloses a three party transaction, granting access to a third device to said personal data in either said first data storage device or said second data storage device only when said first and second storage devices are operatively coupled together. (see Kramer col. 4, lines 57-65; col. 140, lines 39-42: three party transactions utilizing smart card technology)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Storck to securely protect data utilizing encryption keys as taught by Kawan and to enable performing a three party transaction utilizing three smart card type devices as taught by Kramer. One of ordinary skill in the art would be motivated to employ Kawan in order to offer enhanced convenience and security completing transactions utilizing smart card technology (see Kawan col. 2, lines 12-17) and to employ Kramer in order to enable optimum and secure two party and three party electronic transactions. (see Kramer col. 3, lines 42-46).

Regarding Claim 15 (Currently Amended), Storck discloses said first and second personal data storage devices are operatively coupled together through at least one of either a wireless data link or a mechanical connector. (see Storck col. 5, lines 1-7; col. 12, lines 45-48; col. 4, lines 31-34: split data carrier (i.e. smart card) authorization equals operatively coupled together data carriers (i.e. smart cards)) Storck does not specifically disclose the utilization of three party (i.e. three devices) transactions.

However, Kramer discloses the method of claim 14 wherein said step of granting access to a third device to said personal data in either said first data storage device or said second data storage device only when said first and second personal data storage devices are operatively coupled together. (see Kramer col. 4, lines 57-65; col. 140, lines 39-42: three party transaction utilizing smart card technology)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Storck to enable performing three party transactions utilizing smart card type devices as taught by Kramer. One of ordinary skill in the art would be motivated to employ Kramer in order to enable optimum and secure two party and three party electronic transactions. (see Kramer col. 3, lines 42-46)

Regarding Claim 17 (Original), Storck discloses the usage of encryption technology. (see Storck col. 2, lines 58; col. 19, lines 56-59: encryption security techniques) Storck does not specifically disclose the usage of encryption keys in the secure protection of data. However, Kawan discloses the method of claim 14 wherein said first and second encryption keys are same. (see Kawan col. 5, lines 52-56; col. 9, lines 2-26; col. 10, lines 7-17; col. 4, lines 66-67: encryption keys utilization for protection of data, symmetric keys (i.e. same encryption keys))

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Storck to securely protect data utilizing symmetric encryption keys as taught by Kawan. One of ordinary skill in the art would be motivated

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to employ Kawan in order to offer enhanced convenience and secure completing transaction utilizing smart card technology. (see Kawan col. 2, lines 12-17)

8. Claims 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storck et al. (US Patent No. 5,434,395) in view of Kawan et al. (US Patent No. 6,289,324).

Regarding Claim 18 (New), Storck discloses a method of securing access to data stored in a personal data storage device comprised of the steps of:

- a) storing personal data in a smart card and an enabling key device that are capable of being operably coupled to each other; (see Storck col. 19, lines 51-56: smart card data storage)
- c) prohibiting a transaction between the smart card and another device unless the smart card and the enabling key device are operatively coupled together. (see Storck col. 12, lines 45-48: authorization required before transactions, split authorization required two devices coupled together)
- b) Storck discloses the usage of encryption technology. (see Storck col. 2, lines 58; col. 19, lines 56-59) Storck does not specifically disclose the usage of encryption keys in the secure protection of data. However, Kawan discloses the usage of encryption keys for encrypting said personal data in the smart card using a first encryption key and encrypting said personal data in the enabling key device

using a second encryption key; (see Kawan col. 5, lines 52-56; col. 9, lines 2-26; col. 10, lines 7-17: encryption key utilization for secure protection of smart card data)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Storck to securely protect data utilizing encryption keys as taught by Kawan. One of ordinary skill in the art would be motivated to employ Kawan in order to offer enhanced convenience and security completing transactions utilizing smart card technology. (see Kawan col. 2, lines 12-17)

Regarding Claim 19 (New), Storck discloses the method of claim 18, wherein said step of prohibiting a transaction between the smart card and another device unless the smart card and the enabling key device are operatively coupled together (see Storck col. 5, lines 1-7; col. 12, lines 45-48: split authorization requires coupled devices) is comprised of the step of prohibiting the transaction unless the smart card and the enabling key device are coupled together through at least one of wither a wireless data link or a mechanical connector. (see Storck col. 8, lines 18-21; col. 10, lines 11-13: connection required for data transactions)

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9 am - 7 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K H S

Kyung H Shin
Patent Examiner
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Apr. 14, 2005


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